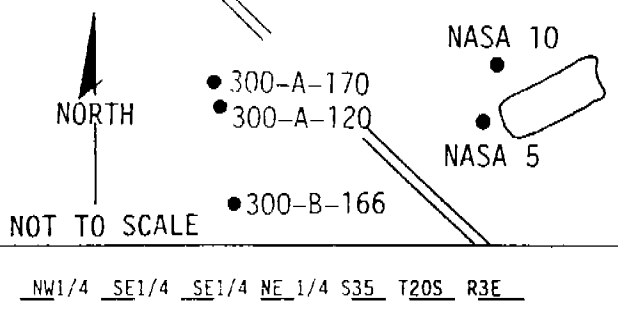


LITHOLOGIC LOG

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LOCATION MAP:



SITE ID: NASA-WSTF LOCATION ID: 300-A-170

SITE COORDINATES (ft.):

N 230954.59 E 418517.47

GROUND ELEVATION (ft. MSL): 4911.28 (Brass Cap)

STATE: NEW MEXICO COUNTY: DOÑA ANA

DRILLING METHOD: MUD/AIR-FOAM ROTARY

DRILLING CONTR.: LARJON

DATE STARTED: 23 FEBRUARY 87 DATE COMPLETED: 26 FEBRUARY 87

FIELD REP.: B. HOBBS/P. LINLEY

COMMENTS: Top Bedrock @ ~ 102'. Total Depth = 182'

LOCATION DESCRIPTION:

Depth	Visual %	Lith	Drilling Time Scale:	Sample Type and Interval	Lithologic Description
0'-182'			not available	0'-127.8' cuttings	0'-5' <u>SURFICIAL ALLUVIUM</u> Grayish orange pink (5 YR 7/2) to dark gray (N3); cuttings are coarse-grained sand and gravel up to 1" in diameter; sub-rounded to subangular; poorly sorted. Unconsolidated. Clast lithologies include limestone, rhyolite and quartzite.
5	+++++VV				5'-102' <u>ALLUVIUM (Santa Fe Group)</u>
10	+++++VVV				5'-25' Light brown (5 YR 6/4) to medium dark gray (N4); cuttings are coarse-grained to very coarse-grained sand and gravel; subrounded to subangular; moderate to poorly sorted. Unconsolidated. Clasts: limestone, rhyolite and quartzite.
15	+++++VVVV				
20	+++++VVVV				
25	+++++VVVV				25'-45' Grayish orange pink (5 YR 7/2) to dark gray (N3); cuttings are coarse-grained to very coarse-grained sand and gravel; subrounded to subangular; poorly sorted. Unconsolidated. Clasts: limestone, quartzite and rhyolite.
30	+++++VVV				
35	+++++VVV				
40	+++++VVVV				
45	+++++VVVV				45'-75' Very pale orange (10 YR 8/2) to medium dark gray (N4); cuttings are very coarse-grained sand and gravel; subrounded to subangular; poorly sorted. Caliche coatings on some clasts. Moderately consolidated. Clasts: limestone, quartzite, rhyolite and dolomite.
50	+++++VVVV				

Depth	Visual %	Lith	Drilling Time Scale:	Sample Type and Interval	Lithologic Description
					<u>ALLUVIUM (Santa Fe Group)</u> Continued
50	++++VVVV				
55	++++VVVV				
60	++++VVVV				
65	++++VVVV				
70	++++VVVV				
75	++++VVVV				75'-95' Grayish orange (10 YR 7/4) to medium gray (N5); cuttings are very coarse-grained sand and gravel; subangular; moderately to poorly sorted. Caliche coating and cement present. Moderately to well consolidated. Clasts: limestone, rhyolite and quartzite.
80	++++VVVV				
85	++++VVVV				
90	++++VVVV				
95	VVVVVVVVVV				95'-102' Grayish orange (10 YR 7/4) to dusky yellowish brown (10 YR 2/2); cuttings are very coarse-grained sand and gravel; subangular to angular; moderately sorted. Well consolidated. Clasts predominantly rhyolite (?) with some limestone and quartzite.
100	VVVVVVVVVV				
105	VVVVVVVVVV				102'-182' <u>OREJON ANDESITE</u>
110	VVVVVVVVVV				102'-115' Grayish red purple (5R 4/2); very coarse cuttings. Bedrock (?). Clasts are predominantly andesite.
115	VVVVVVVVVV				115'-120' Grayish olive green (5GY 3/2); very coarse cuttings <1/6" to <3/4". Andesite bedrock. Clasts are predominantly epodotized andesite.

Depth	Visual %	Lith	Drilling Time Scale:	Sample Type and Interval	Lithologic Description
					OREJON ANDESITE Continued
115	VVVVVVVVVVVV				
120	VVVVVVVVVVVV				
125	VVVVVVVVVVVV				
130	VVVVVVVVVVVV			127.8'-176.5' core	127.8-176.5' *****core interval***** See below and attached description.
135	VVVVVVVVVVVV				127.8'-135' Grayish blue green (5 BG 5/2); fine-grained ground mass with porphyritic plagioclase and microcline, highly altered to sericite and sausserite. Microfractures are present and filled with calcite, sulfides, quartz. No flow structures observed.
140	VVVVVVVVVVVV				135'-150' Light to olive green (5 GY 5/2 to 5 GY 3/2); Orejon andesite; highly altered, original texture lost. Epidote and chlorite common, phenocrysts of plagioclase and amphibole present.
145	VVVVVVVVVVVV				
150	VVVVVVVVVVVV				150'-175' Phenocrysts in the Orejon are less abundant and smaller, color grayish blue green (5 BG 5/2).
155	VVVVVVVVVVVV				
160	VVVVVVVVVVVV				
165	VVVVVVVVVVVV				
170	VVVVVVVVVVVV				
175	VVVVVVVVVVVV			176.5-182 cuttings	175'-182' Sample cuttings of Orejon andesite same as above core.
180	VVVVVVVVVVVV				Total Depth = 182'.